

Daily GLOWBUGS

Digest: V1 #134

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

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%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

Subject: glowbugs V1 #134

glowbugs

Saturday, October 11 1997

Volume 01 : Number 134

Date: Fri, 10 Oct 1997 15:39:22 +0100

From: BOB DUCKWORTH <bob@atl.org>

Subject: push pull 2 x 807 xtal tx.

My brother found a copy of the 1938 RCA air cooled transmitting tube manual at the flea market. In the 'circuits' section is a nifty 2 x 807 push pull xtal tx. 30W. It's still a cheap tube. Now to scare up a big xtal.
- bob

Date: Fri, 10 Oct 1997 16:38:33 -0400 (EDT)

From: rdkeys@csemail.cropsci.ncsu.edu

Subject: Re: Plate plucking vs. series capacitors

> I plucked the plates from a capacitor last night to reduce it to a single
> plate tuning cap for the UY-227 detector and one step that I will start
> building this weekend. I started to think that maybe I should have just
> put a 25 pF trimmer in series with the tuning cap and that way I would have
> variable band edge setting capability.
>
> Anybody have experience one way or the other?

Both ways work fine. The former requires only one capacitor, the latter two. IFF the tuning capacitor is valuable or historically important, or otherwise non-replaceable, then use the series cap to set the range and run with it.

Since your regen set is assumingly ``period'' with '27's in it, I would not be against plate plucking. I don't like to pluck plates in early period caps of historic interest. They are too rare. For generic caps, pursue accordingly.

If you are just experimenting, but don't have a good singleplate cap, for tuning purpose, try the series pair as an expedient. If you are shooting for a 10pf tuning cap, then find a 25pf or so series cap and set it accordingly (roughly 3/4 meshed) or a 50pf cap and set it about half mesh for starters. Twiddle until the range is where you want it. Then pad with external padding or adding/subtracting coil turns.

For junk box caps, and things I know are going to be specifically regen or narrowband Hartley fodder, I will pluck plates if the plates are not too many in number (i.e., caps about 100pf or less, only, since larger caps are used elsewhere, as in throttle condensers, Hartley bandset condensers, etc.). I don't usually pluck plates if there are more than 10 or so plates, because that is a tad wasteful (unless I can recycle the plates, as on big transmitter tuning capacitors with the bolt-in plates). I save any plates that look like they might be useful elsewhere.

For regens, I find the junk 35-50pf things that seem to abound at hamfests, and pluck those. Ditto for Hartley narrowbander tuning caps (it is nice to have a 3500-3600 tuning range on Hartleys).

I usually prefer one cap rather than two, but have used the large multiplate caps with a series cap in both Hartleys and regens with good success.

For series caps in regens, you can use small trimmers or use fixed caps. In Hartleys, find a good fixed cap of the air plate kind or a good quality variable. Junkers cause squirrely Hartleyitis.

That is all I can offer now.....

Bob/NA4G

Date: Fri, 10 Oct 1997 16:40:09 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Plate plucking vs. series capacitors

Another thought for low value variables --- use a split stator cap, seriesed. That will put the rotor above ground, so use an insulated shaft coupling and space it well away from the front panel if unshielded.

Bob/NA4G

Date: Fri, 10 Oct 1997 16:43:52 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Sliding Coil Coupling and NEW FUNKY TUNING CAPS

> I'd suggest using 1/4-20 nylon bolts and nuts to set up a permeability
> tuning system. Most good hardware stores have them and they give you a lot
> more control over the nature of the fit.
>
> --Jeff Duntemann K7JPD

Good thought, Jeff..... Also, why not make a capacitor in the manner of a plate neutralizing capacitor, for tuning purposes, using one of the

1/4-20 bolts or threaded rods, and a nutplate on the front panel with a turns counting crank..... complex, but might work pretty well.

Bob/NA4G

geee.... the list is an idea mill, today.....(:+)}.....

Date: Fri, 10 Oct 1997 16:46:18 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Hartley Using an 813

> 73 de W5EGP
> - Steve -
> *****

Steve.... for the fun of it, refresh the list's collective memory of your regen detector experiments using an <<<< 833 >>>> detector!

Bob/NA4G

Date: Fri, 10 Oct 1997 14:10:09 -0700
From: Walt Turansky <turansky@xroads.com>
Subject: Re: Plate plucking vs. series capacitors

>> I plucked the plates from a capacitor last night to reduce it to a single
>> plate tuning cap for the UY-227 detector and one step that I will start
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>non-replaceable, then use the series cap to set the range and run with it.
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>be against plate plucking. I don't like to pluck plates in early period
>caps of historic interest. They are too rare. For generic caps, pursue
>accordingly.

The cap whose plates I plucked was an 8-26 pF transmitting variable that I obtained from Fair Radio. They are surplus trimmers from the TU-# series tuning drawers and make very nice bandspread caps. I'm using one on my 80m Hartley. Fair still has them; I called this morning and ordered a few more. They look like they would make very good neutralizing caps with a plate or 2 plucked out.

73 de N7QFN,
Walt

Date: Fri, 10 Oct 1997 14:05:38 -0700
From: Walt Turansky <turansky@xroads.com>
Subject: Re: Plate plucking vs. series capacitors

Bob,

Great idea.

>Another thought for low value variables --- use a split stator cap, seriesed.
>That will put the rotor above ground, so use an insulated shaft coupling and
>space it well away from the front panel if unshielded.

I have some NOS Millen 25 pF per section split stators that I am planning to use in a mulit-band Hartley or TPTG rig (I've been studying the 1929 H'book recently). I had planned to use the both sections in parallel on 80m and one section on 40m. Putting the sections in series ought to be just right for 30m. With the right coil sizes and some creative padding I think I should be able to get 0-100 on the dial for 3500-3600, 7000-7100, and 10100-10200.

73 de N7QFN,
Walt

Date: Fri, 10 Oct 1997 14:36:13 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: push pull 2 x 807 xtal tx.

On Fri, 10 Oct 1997, BOB DUCKWORTH wrote:

> My brother found a copy of the 1938 RCA air cooled transmitting tube
> manual at the flea market. In the 'circits' section is a nifty
> 2 x 807 push pull xtal tx. 30W. It's still a cheap tube.

Could you scan/copy the schematic and mail it to me ?

> Now to scare up a big xtal.

You may not need a big crystal. Put a pilot lamp in series with the crystal and adjust feedback for minimum brilliance with good keying.

Ken W7EKB

Date: Fri, 10 Oct 1997 21:32:10 -0500
From: w5hvv@aeneas.net (Rod Fitz-Randolph)
Subject: Re: Hartley Using an 813

>Steve.... for the fun of it, refresh the list's collective memory
>of your regen detector experiments using an <<<< 833 >>>> detector!

Wow, I bet he wasn't bothered by front end overload!!!!

73

Rod, N5HV
w5hvv@aeneas.net

Date: Sat, 11 Oct 1997 12:42:25 +1000
From: Murray Kelly <mkelly@powerup.com.au>
Subject: Re: Sliding Coil Coupling

Thanks, Jeff. I thought I might need to put a loop of teflon tape thru the hole. Nothing like trying - as you did.

I don't think I made clear the toroid was to supply a 'slug' and not to wind coils on.

Jeff Duntemann wrote:

>
> At 10:39 AM 10/10/97 +1000, Murray Kelly wrote:
> >I have been looking at a couple of glue stick formers that
> >caught my eye. They are the 'paste stick' type and there is
>
> >This would perhaps be the basis for a PTO oscillator, or
> >without the toroid an antenna coupler - just a thought.
>
> I actually tried this a few years ago, and while it worked there is the
> problem that the fit of the screw into the device is very loose, and
> there's no easy way I could devise to tighten it up. (The glue stick
> itself provided a sort of self-lubricated friction brake--but once the glue
> is gone it's just a loose screw/nut fit.) The slightest vibration causes
> the toroid to move around. I'd trust it for an antenna coupler but NOT for
> any sort of oscillator frequency determination.

* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *

Date: Sat, 11 Oct 1997 12:29:58 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Kilroy was there on 3579..... were you????

I had the gear up on 3579 last night from about 0000Z to 0400Z, but no joy, no smoke, no etherzaps, and few dittlededumdedits. A couple of weak ones were there, but nil BAGB QTC. I will fire it up again tonight, and mebbie sees a few o' ye fine bottleburners about on watch.....?

73/ZUT DE NA4G/Bob UP

Date: Sat, 11 Oct 1997 11:03:47 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: Kilroy was there on 3579..... were you????

I was listening from about 0000 to 0400...all __I__ could hear was noise.

On Sat, 11 Oct 1997 rdkeys@csemail.cropsci.ncsu.edu wrote:

> I had the gear up on 3579 last night from about 0000Z to 0400Z, but no
> joy, no smoke, no etherzaps, and few dittlededumdedits. A couple of weak
> ones were there, but nil BAGB QTC. I will fire it up again tonight, and
> mebbie sees a few o' ye fine bottleburners about on watch.....?

Around here, 80 and 40 are clear until about 0000, then this buzz starts,
gets stronger and stronger until by 0400 it is at least S-9, stays that
way until early in the morning, then suddenly stops.

I thought at first it was local noise: now I am convinced that it is some
form of atmospherics.

Ken W7EKB

End of glowbugs V1 #134

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